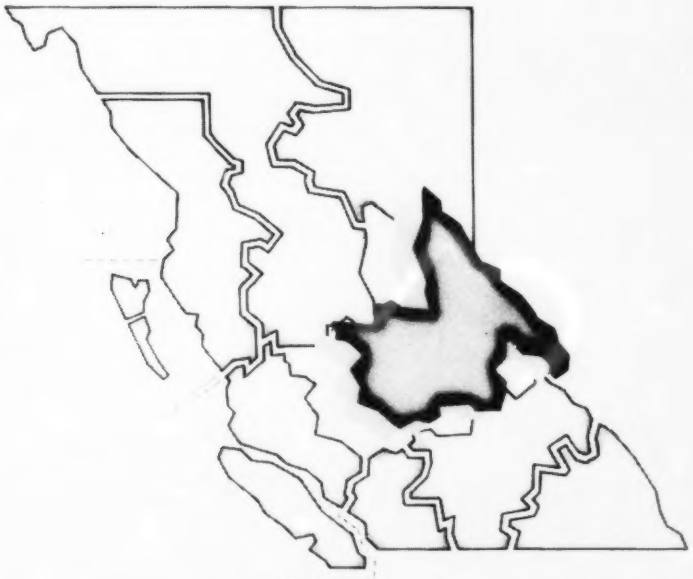
HEALTH CARE DELIVERY

SUMMARY REPORT OF THE CARIBOO DEVELOPMENT REGION HEALTH CARE STUDY



NOVEMBER 1989

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Summary Report of the Cariboo
Development Region Health Care Study
November 1989

Commissioned by Ministry of Regional and Economic Development in co-operation with and supported by:

Ministry of Health

Cariboo Regional Hospital District

Fraser-Fort George Regional Hospital District

Prince George Regional Hospital

The
Coopers
&Lybrand
Consulting Group

90-02645/

Canadian Cataloguing in Publication Data

Coopers & Lybrand (Firm). Consulting Group.
Health care delivery

"Commissioned by the Ministry of Regional and Economic Development in co-operation with and supported by Ministry of Health ... et al."
ISBN 0-7726-1053-3

1. Medical care - British Columbia - Cariboo (Regional district) 2. Medical care - British Columbia - Fraser-Fort George. I. British Columbia. Ministry of Regional and Economic Development. II. British Columbia. Ministry of Health. III. Title.

RA418.3.C3C66 1989 362.1'09711'75 C90-092021-1

ACKNOWLEDGEMENTS

The study commissioned in November 1988 by the Minister of State for Cariboo was the result of an agreement by five agencies to fund and participate in a Region wide study. These agencies include the Minister of State for Cariboo (Minister of Regional and Economic Development), the Fraser-Fort George Regional Hospital District, the Cariboo Regional Hospital District, the Prince George Regional Hospital, and the Ministry of Health. The following people were instrumental in the success of the study, as were the many subcommittee participants.

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Coopers and Lybrand gathered information for this study through research, interviews, brainstorming sessions, statistical data, meetings with Local Area Subcommittees and submissions from individuals and organizations. Coopers & Lybrand acknowledges the vital assistance of the many individuals and organizations which contributed information and ideals to the project. These include, the Project Steering Committee, the Regional Advisory Committee chaired by the Honourable Bruce Strachan, the Local Area Subcommittees in seven communities, provincial government officials and organizations which submitted questionnaire information and briefs.

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1.0 INTRODUCTION

The Cariboo Development Region (CDR) Health Care Study was commissioned in November of 1988 to provide a comprehensive, cohesive and cost-effective plan for developing health care services in the Region.

After a year of intensive data collection and consultation throughout the Region, the consultant has written a technical document of some 450 pages that provides the Region with an information base, a guide for the future, structural alternatives for the future and a tool to promote community understanding of the health care system's challenges and potential. Most important of all for the future of the Region, this document provides a foundation for planning.

The study report lays out the rationale for:

- Fixing major program weakness in the mental health area.
- Addressing infrastructure problems.
- Developing a strategic planning system or systems.
- Addressing specific program issues.
- Realistically establishing a base for local autonomy.

The report has five sections following the introduction:

Environment Scan

This collection of information is essential to successful planning and decision making. Each community is briefly profiled, statistical data is analyzed and the opinions of those involved in the Cariboo Development Region's health care system are incorporated to provide a well rounded view of the Region. Geographic and health status problems are documented, along with the demographic, economic, social and technological trends that will shape the future. In general, the environment scan highlighted an aging population, isolation and aspects of lifestyle and attitude as factors affecting health care services in the north.

Inventory of Health Care Services

This section is a detailed description of existing health care services, strengths and perceived gaps. Mental health and the integration of mental health services within the community is the most prevalent theme. Other concerns include reliance on acute care, the critical role of Emergency Health Services and emerging gaps in direct medical and pharmaceutical services.

Health Service Delivery and Referral Patterns

Like the previous sections, this part of the document prepares a foundation of knowledge upon which to base future decisions. It describes and analyzes the delivery and referral patterns of health services in the CDR. Factors considered include isolation, weather conditions, distance, location of treatment centres compared to residence of patients and the distribution of Medical Services Plan fee practice activity. This section found that referral patterns reflect traditional relationships between communities and a tendency to look south for services.

Future Requirements

The recommendations made in this section are divided into four parts: Overarching Conclusions, Community and Institution Based Recommendations, Track and Trigger and Future Data Requirements.

The Overarching Conclusions reflect the overall theme that the Region's multifaceted, complex problems require comprehensive solutions. This part identifies six high profile initiatives needed to address the CDR's problems. They are: extended mental health services, improved recruitment and retention, reduction of the effects of isolation, improved local co-operation and rationalization, systematic client and need-driven planning, and intense marketing.

The Community and Institution Based Recommendations address more specific health care issues in the Region. Key institutional recommendations include:

- A 90% increase in extended care beds over 10 years.
- An 80% increase in intermediate care beds.
- Development of medical manpower plans.
- Improvement of protocols, co-operation and support in alcohol and drug programs.

The following community-based recommendations are advanced:

- Increase co-ordination of community-based services.
- Continuing care services be expanded with an emphasis on community involvement.
- Emergency Health Services should be based on potential need rather than call volume.
- Mental Health Services should be expanded.
- Services to the handicapped require role clarification.
- Substance abuse programs should emphasize prevention.
- Pharmacy services should be maintained in all communities where they exist.

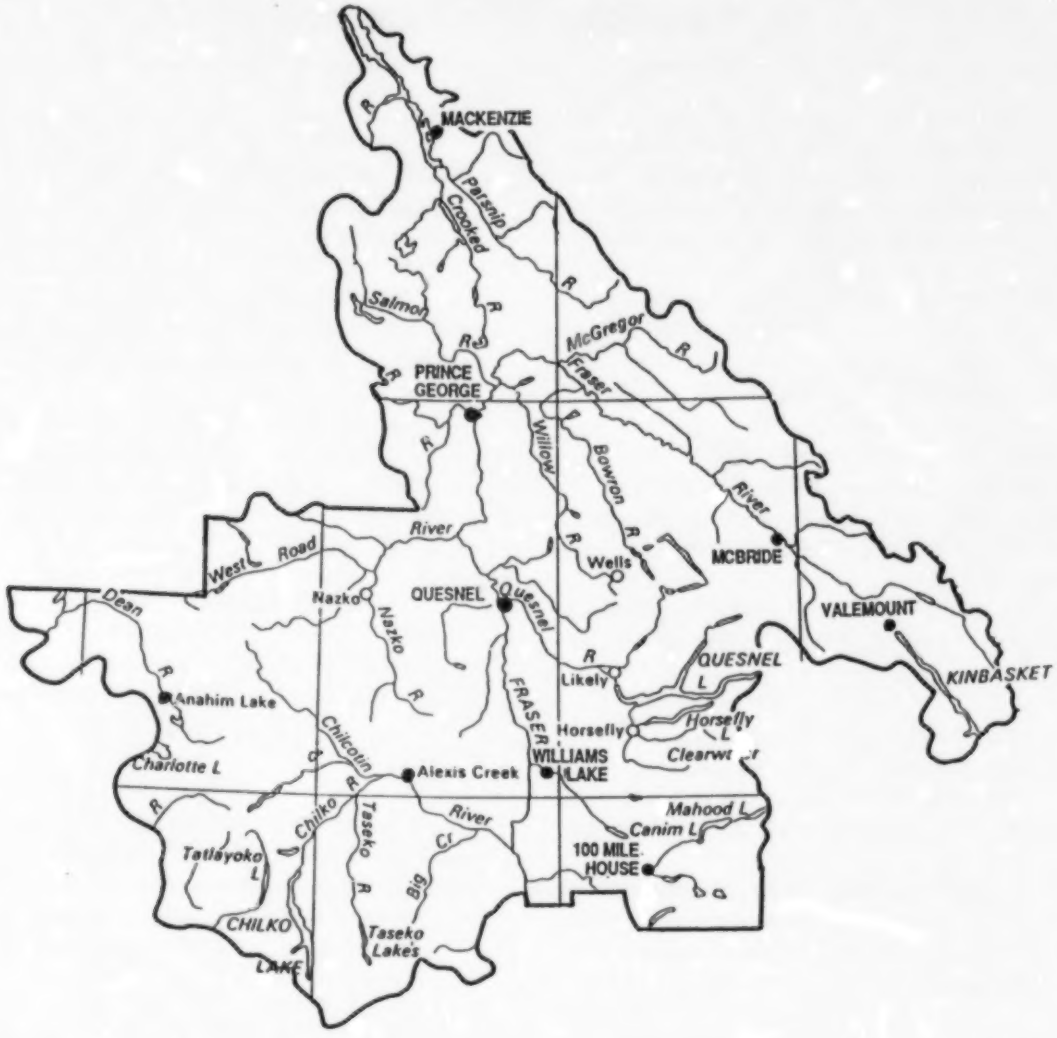
The Track and Trigger Strategy recognizes that all future health care needs cannot be fully identified and assessed in a single study. Areas where potential change should be monitored are noted, and proposed action is described for each item. Areas to monitor include more seniors than projections indicate, potential changes in attitude, public education and use of technology, emergency medical services protocols and AIDS.

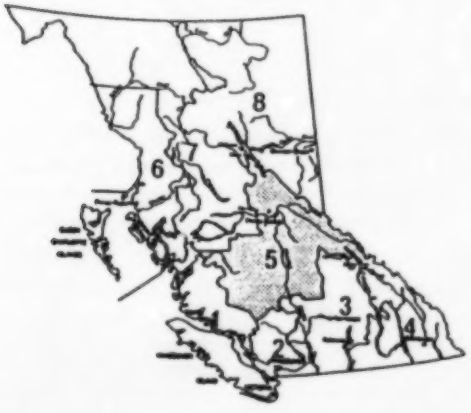
Future Data Requirements is a short part which lists a number of areas where improvements in the collection and analysis of data could facilitate future planning.

Health Authority Concept

The Health Authority concept is a means of establishing a base for local autonomy. For a variety of reasons outlined in the document, the study stops short of recommending full devolution of authority to the Region.

The consultant offers three scenarios for consideration. All three try to meet the particular needs of CDR residents, and offer limited delegation of authority within the Region. Two of these scenarios involve partial delegation of authority in specific areas. The third involves full delegation of authority over a specific program to Prince George. Successfully implementing any of these scenarios will create a base for increased autonomy in the future.





DEVELOPMENT REGION 5

CARIBOO

2.0 SUMMARY REPORT

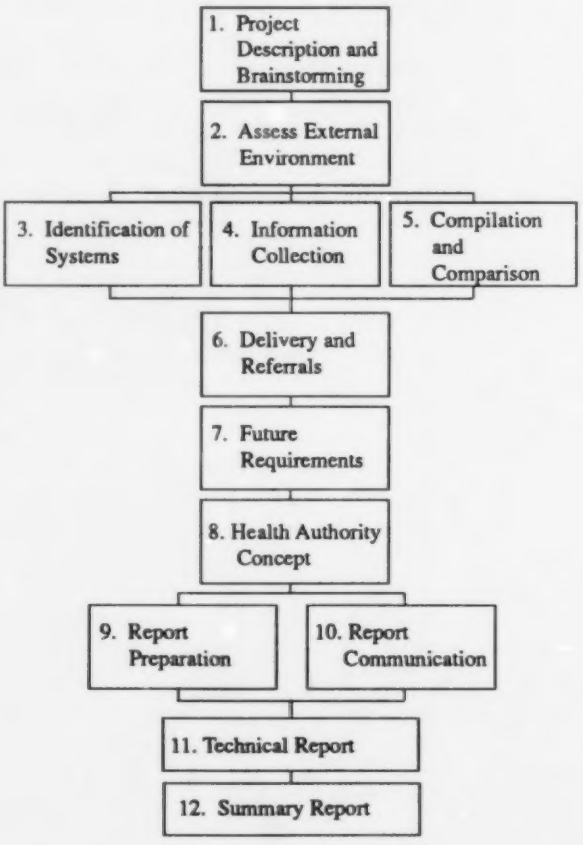
This document, entitled Health Care Delivery - Summary Report of the Cariboo Development Region Health Care Study, focuses on the conclusions and recommendations contained in the extensive 450 page technical volume. This summary is intended for distribution to those interested in health care issues. It communicates the overall intent of the study, provides a synopsis of the recommendations and outlines the evaluation of a health care authority.

Interest and support for the Health Care Study began with the initiation of a role study for Prince George Regional Hospital. This was expanded into a far broader report covering health care delivery in the entire Development Region. The expanded study had three important objectives:

1. Examination of all levels of health care delivery throughout the Cariboo Development Region.
2. Examination of the potential for a Health Care Authority.
3. A role study for the Prince George Regional Hospital, labelled "Stage II" of the Study, and not described in this document.

In meeting those objectives, the consultant began with a brainstorming session held in Prince George and attended by 18 people from throughout the Region. Basic data, obtained from the Ministry of Health, Central Statistics Bureau and Statistics Canada, was collected and analyzed. The consultant also travelled throughout the CDR conducting interviews with health care providers and administrators, and meeting with the seven Local Area Subcommittees. The Subcommittees represented the communities of Mackenzie, McBride, 100 Mile House, Prince George, Quesnel, Williams Lake, Valemount and the surrounding rural areas within the two Regional Districts - Cariboo and Fraser -Fort George. The consultant also toured six hospitals in the Region, the Valemount Diagnostic and Treatment Centre, most public health offices, two child development centres, seven extended and intermediate care facilities in five communities, five ambulance stations and the Chilcotin Region's Red Cross Outpost Hospital and Federal Health Centres.

The resulting technical document provides the CDR with an excellent information base. This summary offers a condensed version of the results of the above efforts. The study approach is illustrated below.



3.0 General Recommendations

The Cariboo Development Region (CDR) has a solid foundation in basic health care. To maintain and improve that level of care in these days of swift change and progress, several key areas must be addressed. The system must be designed to respond to new and emerging concerns, with special emphasis placed on the community.

The consultant recommends that the existing system be tailored to fit the particular needs of the Region. The following general areas of concern should be carefully evaluated and marketed to the communities in a positive way. They must also be considered in conjunction with the recommendations contained in Section 4.0 Specific Recommendations. The general and specific recommendations together can be used as a basis for on-going change.

3.1 MENTAL HEALTH

Mental health, which includes mental illnesses, drug and alcohol-related problems, child and sexual abuse, family breakdowns, teenage pregnancy and early mortality due to lifestyle problems, is the major program issue in the CDR.

Breaking cycles of abuse, will require a high profile mental health project which could be loosely modelled after the Victoria Health Project. The point of the project would be to integrate and co-ordinate community programs and resources. Hospitals would be seen as the main actors in the program and emphasis would also be placed upon community-based resources.

Recommendation

- Resources should be provided to support the above project for 3-5 years. Funds should be devoted to projects which enhance public education programs geared to "breaking the cycle" over the long term.
- The project should take advantage of existing structures and initiatives within the community.
- Recruitment and retention of mental health professionals must be dealt with as a priority. This includes establishing networking, support and monitoring systems.
- Mental health related services must become more fully integrated.
- A public relations campaign should be launched to outline the consequences of some mental health problems such as stress, substance abuse or improper nutrition, and emphasize wellness.

3.2 RECRUITMENT AND RETENTION

Recruitment and retention of health care professionals are common problems in isolated regions.

As well as having a limited number of peers, working in the north has perceived or real drawbacks such as a harsh climate, more limited lifestyle, fewer cultural activities and difficult access to specialized services, collegial and educational support. The less obvious benefits of a northern lifestyle include cost of living, outdoor recreation, a sense of community, the challenge of a varied practice and the ability to "make a difference."

The proposed solution is to attack the recruitment and retention problem by establishing a professional base. In all the following areas, it is critical to define standards and limitations, monitor, provide professional support and consult with the agents involved.

Recommendation

- Make the CDR a training centre. Make every effort to provide health care training and education, push for northern internships and sponsor conferences. Community colleges and the proposed northern university could play a crucial role in meeting this objective.
- Give priority and budget support to northern networking through conferences, seminars and other means of communication.
- Attract professionals during their training, internships and practicums, in the expectation that they will form contacts, start families and become part of the community.
- Financial incentives, such as bonuses for staying a certain initial time period or community-based "packages," should be explored but not unduly emphasized.
- International recruiting should be aimed at those likely to stay in the CDR.
- Alternatives to "traditional practices," should be examined and solutions such as greater networking of certain services through volunteer groups and greater use of nurse practitioners and primary care teams should be pursued.

3.3 ISOLATION

The perils of isolation are readily apparent to anyone who has travelled in the Region, particularly in stormy winter conditions. While physical isolation cannot be reduced, its impact upon health care services can be lessened.

Recommendation

- Establish and experiment with linkage systems such as facsimile, computer and satellite television. Health care professionals in the Region should be in contact with each other and with resources elsewhere to better provide essential services like diagnosis, second opinions and referrals.
- Networking and training will assist in reducing isolation.
- Explore transportation related successes and problems with a view to improvement.
- Retaining and expanding volunteer forces should be a priority. Individual volunteers with long or outstanding records of service should be considered for training normally only available to full-time professionals.

3.4 CO-OPERATIVE ENDEAVOURS

Despite the high level of "sick care" facilities in the CDR the consultants were struck by the dominance of community ambitions over client services, turf wars between caregivers and general lack of integration between institutional and community-based services.

Because the Cariboo Development Region is a widespread, sparsely populated area, its health care system relies upon health care professionals to work together to provide quality care.

Recommendation

- There must be a rationalization of services between McBride and Valemount, and between 100 Mile House, Williams Lake and Quesnel. Joint meetings of boards and administrators must become standard practice. If cooperation cannot succeed on a voluntary basis, the Ministry of Health should chair these meetings and/or joint boards should be established.
- Joint work should be done on the extension of care to the elderly. Where possible, the continuum of services should be linked.
- Community-based services should be explored as an alternative to institutional services.
- An arbitration team should be established to settle differences of opinion and suggest ways to resolve problems between individual professionals or communities.
- Service relationships with cities outside the region should be recognized as legitimate

approaches to the provision of health care, especially in the cases of 100 Mile House/ Kamloops and Valemount/Jasper.

3.5 PLANNING

The general development of integrated health care programs in the Region is done on an adhoc basis. The system tends to be driven by funding systems rather than resident or client need.

It is strongly recommended that the Region build on the impetus of this study to make the CDR one of the pre-eminent planning Regions in the province. However, a balance must be maintained between securing political representation and support, and involving and respecting the judgement of health care professionals.

Recommendation

- Ways to begin the planning process include: possible establishment of one or more health care authorities (See Section 4.4), expansion of the role and mandate of the Union Boards of Health and/or Local Boards of Health and/or Regional Hospital Districts, giving the Regional Advisory Committee a planning mandate and building on the success of the interagency committee in Quesnel.
- Any committee(s) responsible for planning must have real authority (eg. facilities won't be built until recommendations are discussed by the committee).
- Resources must be invested to keep the information base developed in this study up to date.
- Bodies given a planning mandate should be responsible for using the Track and Trigger Mechanism (See Section 4.2) to monitor issues such as the growth of the elderly population in the Region.
- The committees should be responsible for monitoring receptiveness to the wellness concept within the Region, and for continuing to promote the concept.
- The committees should evolve a planning framework for the Region.
- A region-wide planning symposium should be held every year or two.

3.6 MARKETING AND ACCOUNTABILITY

In today's fast paced, information-oriented world, it is not enough to provide good sick care, and hope people will hear about it and improve their lifestyle.

An active marketing approach is required to reduce costs by making use of the system more efficient and to encourage personal responsibility and support for health care in the CDR.

Recommendation

- That the results of this study should be made available throughout the CDR.
- Progress made in implementing the study's recommendations should be reported annually to the public.
- Any new initiatives undertaken in the CDR should be publicized and marketed to make the services known to potential users, reduce any negative images of health care in the Region, make the communities feel a part of the health care system.

4.0 SPECIFIC RECOMMENDATIONS

4.1 INSTITUTIONAL AND COMMUNITY CARE

The following section provides recommendations addressing specific issues within the Cariboo Development Region's health care system. These recommendations reflect the general recommendations and conclusions outlined in the previous section.

4.1.1 Acute Care Recommendations

Medical/Surgical Beds

There is little immediate need for additional medical/surgical, paediatric or maternity beds in the Cariboo Development Region. The demand for beds is very dependent upon the aging population as well as the role of the Prince George Regional Hospital. The outcome of a second study to clarify that role may impact upon bed requirements.

Bed Allocation

While reallocation of paediatric to adult beds should be considered, bed distribution is best decided by individual hospitals and the Ministry of Health. In order to maintain a margin of safety, bed conversion should take place at a rate of no more than 75%. For example, if demand indicates that 12 beds are no longer required, only nine should be made available for conversion.

Psychiatric Beds

Five psychiatric beds are required in Prince George, and five stabilization and assessment beds are required in Williams Lake.

Outpatient and Ambulatory Care Services

Current inventories of outpatient and ambulatory care services within institutions should be reviewed in order to find ways to deliver more ambulatory services in the future.

The psychiatric day care joint venture between G.R. Baker Memorial Hospital and the mental health centre in Quesnel should be evaluated, and possibly implemented in Prince George and Williams Lake.

Utilization Management

All hospitals should consider installing utilization management systems to encourage effective and efficient use of inpatient and ambulatory services. Physician cooperation should be secured similarly to models currently in place elsewhere.

Planning and Coordination

Planning and coordination between and within hospitals must be an active and continuous part of the health care management process. The existing process of cooperation between Valemount and McBride must continue, with the goal of forming a joint health care society. Future continuing care requirements should be addressed in order to remove competition and encourage cooperation between the communities.

It is strongly recommended that Williams Lake and Quesnel continue the process of cooperation with the goal of developing the joint society concept.

Technology Evaluation

Consideration should be given to establishing a Regional Co-ordinating body with a mandate to rationalize and evaluate current and future use of medical technology in the CDR. Technology should be evaluated before it is introduced to the medical mainstream by a technology assessment team.

Hospital and Community Interface

Mechanisms must be established to bridge gaps and smooth transitions between hospital

and community. This is an essential foundation for a shift from institutional to community based services.

Discharge Planning

A multi-disciplinary discharge planning team should be established at one hospital. If successful, this program should be replicated in other hospitals throughout the Region.

4.1.2 Continuing Care Programs

Extended Care Beds

By 2001, the number of extended care beds should increase by 90% to 130 new beds in the CDR. Because the number of seniors in the area is expected to almost double by 2001, this increase will maintain the extended care bed/population ratios.

Staging and Location

As much as possible, an attempt should be made to reduce or delay institutional extended care needs through increased use of community care. As well, increases in beds should be staged, and the needs for 2001 examined in light of community intervention.

More specifically, Williams Lake should apply for 15 extended care beds immediately, and another 25 beds by 2001. 100 Mile House should receive 10 extended care beds by 1996 and eight more beds by 2001. Quesnel will need six beds by 1996 and seven more by 2001. McBride will need two beds by 1996. Mackenzie will not require extended care beds for the foreseeable future.

Prince George should receive an additional 57 beds, 25 immediately and the remainder by 1996. The Prince George beds should be incorporated into a multilevel facility, or a stand-alone facility on the PGRH site.

Intermediate Care Beds

The number of intermediate care beds in the CDR should be increased by 256 additional beds by 2001. This requirement can be reduced if non-institutional services are increased. A minimum of 10% of these beds should be set aside for psychogeriatric services.

Bed Location

Of 256 new beds, 26 should be classified as psychogeriatric and located as follows: Williams Lake should receive 5 beds, as should 100 Mile House and Quesnel. Prince George should receive 11 beds.

The remaining 230 beds will be distributed as follows: Williams Lake and 100 Mile House should split 65 beds. Quesnel should have 50 and Prince George should have 115.

Geriatric Team

Subject to new funds, a multidisciplinary geriatric team should tour the CDR to provide services to the elderly and consultation to local physicians. The team should include a gerontologist or physician with specific geriatric training, a social worker, a psychiatric nurse and a physiotherapist.

Prince George Senior Care Facility

A multilevel senior care facility with a mandate to provide community-based health care should be established in Prince George. This centre would house new extended care beds, new intermediate care beds, day care services, respite care and a convalescent unit.

The centre should be committed to recognizing the need for a continuum of care.

4.1.3 Direct Medical Care

In anticipation that recruitment and retention problems will be dealt with in the long term as recommended in Section 3.2, the

following immediate steps should be taken.

Document a Medical Manpower Plan that includes options for dealing with a shortage of medical specialists. Consider short term strategies such as financial incentives and expanding UBC's Outreach Program beyond psychiatry. Rationalize specialties on a Regional basis and build on the notion of joint structures.

4.1.4 Alcohol and Drug

Institutional Arrangements

Hospitals in the CDR should develop and implement substance abuse protocols, beginning with one to address alcohol abuse. Referral arrangements for substance abuse patients should be established and made known to both patient and service providers throughout the Region.

The new Chemical Dependency Team at Cariboo Memorial Hospital should be evaluated, and if successful similar programs should be developed for other hospitals. Follow up services should ensure that patients receive treatment for both primary and secondary medical conditions.

In order to co-ordinate work with preventive initiatives, the Chemical Dependency Teams should have their mandate expanded to accommodate community outreach.

The building that houses the detoxification and treatment facility in Prince George should be replaced or improved since it is generally recognized as being sub-standard and does not meet the needs of the program.

4.1.5 Community Based Care

Strengthening Community Based Services

Community based continuing care services such as home support, home nursing care and community physiotherapy should be enhanced to provide more equitable access to services, facilitate the shift from institutional to community based services and foster awareness and support for community based services.

Adult Day Care Programs

100 Mile House should introduce an Adult Day Care pilot program that will complement home support and the home nursing program. The community's well established volunteer agencies put 100 Mile House in an excellent position to support this program.

Increase Case Management Function

Throughout the Region, the case management function of long term care assessors should be supported through increased staffing for the position.

Mobilize Volunteer Sector

Each community in the Region should develop and implement a co-ordinated plan to mobilize the volunteer sector within their communities.

4.1.6 Emergency Health Services

System Recognition

Each service area should be publicly commended for the excellent services they currently provide.

Personal Recognition For Volunteers

The spirit of volunteerism is essential to the Emergency Health Services and must be maintained through recognition of volunteer efforts.

Level of Service

The criteria for ambulance services should be based on potential need as well as call volume, especially in areas far from urban centres. The use of helicopters should be officially sanctioned by Emergency Health Services.

Airports

The airport at 108 Mile House should be upgraded to support Instrument Flight Rule (IFR) landings for the 100 Mile House area. Similarly, at least one of the runways in each of the Chilcotin and Robson Valley should be paved to 3,500 feet and offer IFR capability.

Fees

The fee structure should be changed to a flat fee for rural residents to ensure that they are not unfairly penalized by where they live.

4.1.7 Mental Health Services

Model

A comprehensive model for mental health services should be established in the Cariboo. The model should reflect a continuum of services ranging from low key counselling to acute care. All existing services should be included in the model.

Integration and Identification of Gaps

There should be co-ordination of services and information exchange taking place by community throughout the CDR. In each community, a concerted effort should be made to address and priorized service gaps identified in the main report.

Referral

All agencies or medical practitioners referring an individual for mental health services should take responsibility for informing the receiving agency about the referral and following up with the individual involved.

Education and Research

Community based mental health programs should be built on research into community attitudes and community education about mental health.

Standards and Monitoring

Standards and monitoring mechanisms must be established for community based services.

4.1.8 Services to the Handicapped

Jurisdictional Clarification

There must be jurisdictional clarification between the Ministries of Social Services and Housing, Health and Education regarding their roles in services to the handicapped. Communication and co-ordination must be established to reconcile service gaps and duplications.

4.1.9 Alcohol and Drug Programs

Physician Training and Education

Physicians should be trained to recognize the underlying causes of substance abuse and be familiar with available services, appropriate procedures and new developments or breakthroughs in research. While many physicians are knowledgeable in this area, an effort should be made to reach those less familiar.

Targeting

As part of the current TRY (The Responsibility is Yours) program, or in anticipation of an Extended Mental Health Service, community based drug and alcohol programs should be increasingly targeted at identifiable groups that abuse according to consistent patterns.

Co-ordination

Formal co-ordination between mental health services, alcohol and drug services, the legal authorities, crisis centres, the RCMP, ICBC and other significant agencies should be established.

Communication, Responsibility, Public Awareness and Community Education

The CDR must emphasize long term commitment to communication, responsibility, public awareness and community education by attacking the problem from all sides over a protracted period of time.

4.1.10 Federal Medical Health Services

The Ministry of Health should be encouraged to discuss proposed changes in the delivery of health care to the native population with the Federal Medical Service Branch. Its potential impact on both the native and non-native populations in communities currently served by Federal Medical Services should also be discussed.

The established arrangement should be continued between the Federal Medical Services Branch and the B.C. Ministry of Health to serve the entire population of the Chilcotin area.

4.1.11 Miscellaneous

Transportation

Services to the handicapped and the proposed Adult Day Care facility in 100 Mile House require a solid transportation system capable of guaranteeing service access. Transportation services should be coordinated to eliminate service overlap and meet this need.

Pharmacy

Pharmacy services should be maintained in all communities where they presently exist. The Government may have to step in to ensure they are maintained. In locations where none are present, some form of stipend or subsidy may be appropriate.

Information and Awareness

Information and awareness health care services, especially for seniors, should be created. One option is adapting Nanaimo's "New Images of Aging" to fit the CDR's needs. It provides an awarenessprogram that teaches stress management, fitness, drug and alcohol awareness, nutrition, loneliness and pain coping mechanisms. Another option is to set up telephone lines dedicated to providing information on senior services and/or health services.

Home Alarm

The home alarm system that exists in Prince George should be evaluated and considered for expansion throughout the CDR.

Support for Early Discharge Patients

Convalescence houses should be considered for early discharge patients to stay in while they convalesce, thus avoiding bed-blocking the larger institutions.

4.2 THE TRACK AND TRIGGER MECHANISM

Track and Trigger is a planning mechanism used to help plan around inevitable change. In more colloquial terms, it's a way to "go with the flow."

Traditionally, a strategic plan is composed of steps designed to achieve specific objectives. These objectives must be attained to reach the organization's goals and fulfill its mission. However, the current working environment is changing so quickly, that the goals are often out of date or unattainable by the time these objectives are realized.

Track and Trigger is a method of keeping objectives and goals current and relevant. It is used to highlight areas of potential change, monitor those areas and adapt the plan to accommodate changing circumstances. The following could affect the dynamics of health care delivery in the Cariboo Development Region. They are the type of issues suited to the application of the Track and Trigger Mechanism.

More Seniors

The seniors population in the CDR is expected to almost double by 2001, but some professionals and politicians say this is a conservative estimate. Because seniors tend to be heavy users of health care services, it is important to track the senior population. Population pressures may mean that the Region will need more acute care, long term care, in-home care, psychogeriatric care and support for age-related diseases than present projections suggest. The emphasis and form of care should be sorted out now rather than in a crisis situation.

A Smaller Percentage of Young Adults

While there is a decreasing percentage of young adults in the CDR, their number should remain constant until about 2001, when at that time it is expected to increase dramatically as the childbearing population ages. If this projection is accurate, the CDR has a built-in opportunity to plan for the next boom. The Region should consider taking advantage of the coming period of relative stability to improve pre-natal and "wellness" education. Education now could avert or anticipate problems after the turn of the century.

More Split and Single Parent Families

Like the rest of the province, the CDR has a growing number of split and single parent families. The stress of family break ups can create a need for life-style counselling and guidance. This is another group that would benefit from "wellness" education.

The future prevalence of this circumstance, combined with the attitudes in the Region are worth tracking. If the trend indicates an increase, special targeted interventions should move higher up the priority list.

Changes in Attitude

Attitudinal changes, such as those toward breast feeding and wearing seat belts, and away from drinking driving and smoking, are critically related to health care. The province is now in the midst of a marketing project (TRY - The Responsibility is Yours) intended to encourage people to take responsibility for substance abuse. If TRY does not initiate the desired changes, it might be necessary to supplement, build upon, or completely change the project to make it work in the CDR. If the program is working, follow up with linkages to other parts of the health care system may be appropriate.

If a significant proportion of the population quit smoking and exercised more frequently, the number of patients with heart problems could decrease. It is scenarios like this one that emphasize the importance of tracking real attitude changes as compared to passing trends.

Isolation Transportation Factors

Tracking the improvement and maintenance of highway services can provide important information to caregivers, especially now that privatization is part of provincial policy. Improvements to bad sections of highway could lessen the frequency of Motor Vehicle Accidents (MVAs) in the area, while a decline in service could lead to more, and possibly more serious, accidents. Ambulance access is another concern. If sections of highway are under construction, there might be an increase in the possibility of road accidents or emergency access problems.

Recruitment and Retention of Staff

A critical issue in recruitment and retention is who sets up practices in the north and why. Monitoring the movement of health care staff within the CDR will help judge the severity of the problem. Because some communities will not have as severe a retention problem as others, individual solutions must be found for each. Tracking health care staff movement will allow communities to plan retention strategies.

Health Care Education Opportunities

The CDR must keep track of the perceived educational needs of health care staff in the Region and the potential availability of educational tools. The availability of educational opportunities strongly influences recruitment and retention. Changes in educational availability (eg. proposed northern university), demand and content should prompt a review of priorities and expenditures.

Public Education

One of the most important factors in a good health care system is patient education. If patients do not know how to take care of themselves, do not have the confidence to ask questions or do not have the educational skills to read a prescription or follow a doctor's orders, the system can become inefficient and costly.

As well as remaining aware of educational levels within the CDR, it is important to track health care education offered within the schools, the work place and by public health nurses. Areas that should be covered include personal hygiene, sex education, life-style, nutrition and an awareness of patient's rights and expectations.

If a deficiency in health care education becomes obvious, or if new inroads are possible through the educational process, action is important. Establishment of a northern university would have a positive benefit to both the public and health care staff. Wellness, health and life-style education at an early age is probably the most effective step to overall good health.

Use of Existing Technology

Trends in technological achievement and the lowering cost of technology should be monitored to let the Region take advantage of new technology as it becomes available and affordable. Options to explore include creative use of teleconferencing to lessen isolation, the inclusion of hospitals on the Provnet telephone system and computer linkages with the Ministry of Health data base.

Community vs. Institutional Care

The shift toward community based care is meant to provide those in need of home care, intermediate care or extended care with comfortable, easily-accessed service outside of an institutional setting. It should also decrease work loads in institutions and free up acute beds occupied by patients who do not need a high level of medical attention.

It is vital that the Region track and document examples of this approach in order to anticipate the need for future change in service patterns. The Region must evaluate whether this approach is really decreasing workloads, or only creating higher expectations and demands within the community.

Riverview

The dismantling of Riverview remains unresolved. The Region must keep track of the Ministry of Health's decision regarding Riverview's future and be prepared to act when a decision is made. If the facility is shut down, the CDR must prepare to absorb patients back into the community and ensure the community can provide secure patient care.

High Utilization in Quesnel

There seems to be higher utilization of health care services in Quesnel than in the rest of the CDR. It is important to confirm whether or not this pattern exists, and if it does, to discover the reasons behind it in order to plan for the future. If there is an ongoing, verifiable basis for higher than average utilization in Quesnel, future bed levels recommended for the community should be re-evaluated.

The Future of McBride and District Hospital

To determine health care delivery in the Robson Valley three things should be tracked. It is important to note the trend toward a decreasing population in McBride and an increasing population in Valemount, potential increases in referrals from Valemount to Jasper, and the effectiveness of McBride and District Hospital's conversion to extended and intermediate care beds.

If the changes in population continue, and Valemount residents are consistently referred to Jasper, the Ministry of Health will be forced to make the tough decision of closing, down-scaling or converting the McBride hospital to intermediate and extended care. This decision could seriously affect the economy and morale of the McBride community.

Prince George Cancer Clinic

The province will not decide whether or not to build a new cancer clinic until 1991. At that point, criteria for location will be established. The Fraser-Fort George Regional Hospital District has presented a well documented argument suggesting Prince George as the home of the new Cancer Clinic.

The CDR has a higher prevalence of cancer than the provincial norm and advocates of a Prince George Cancer Clinic note that patients from outside the Lower Mainland can be referred to Prince George as cheaply as to Vancouver. Prince George should be considered for the new Cancer Clinic if the above conditions remain true, and if the Region demonstrates that it can successfully address its recruitment and retention problems.

Breakthroughs in Treating Alcoholism

It is important to track ongoing research that has the potential to achieve breakthroughs in alcohol abuse treatment. If any breakthrough occurs, and the CDR is still experiencing a high prevalence of alcohol abuse, the Region should volunteer to initiate a pilot program. The Ministry of Health should consider the Cariboo Development Region a priority in any province-wide program.

Emergency Medical Services Protocol

There has been some controversy within the CDR about how Emergency Medical Services protocols operate. The system should be monitored to find out if present protocols make this important service inefficient or ineffective. If so, changes in dispatch procedures should be considered.

New Approaches to Health System

Broadly based changes to the public health care system may be initiated by the Ministry of Health. The ramifications of these changes is not clear. However, if the changes conflict with, or impede recommendations made in the Cariboo Development Region Health Care Study, implementation of the report will have to be reassessed.

Acquired Immune Deficiency Syndrome (AIDS)

No reliable information was gathered regarding the incidence and prevalence of AIDS in the CDR. The size of the at-risk population is also unknown. Work must be done on data collection and trend analysis, and if a significant risk is identified, a plan to increase public awareness and facilitate patient care must be put in place.

4.3 Future Data Requirements

This section is expected to provide guidance to health care professionals who collect and compile data in the future. Improved data collection will mean better analysis and planning.

Census Data

Some basic problems exist with the use of Census data. Data collected in the last two census years (1981 and 1986) is far more extensive than data collected earlier, which makes comparison and projection difficult. To protect confidentiality in areas with low populations, a device called "suppression" is used to either roll the data into larger groups, or simply not include it. The cutoff number for suppression has also changed from census year to census year, making comparisons more difficult.

For data more complicated than simple demographics, users should be careful not to develop false expectations of what is available and what is accurately predictable.

Inconsistent Years

A second problem is the years when data was measured. It is impossible to compare tables containing data from 1971-86 with those containing data from 1983-87. Organizations must attempt to present data consistently in terms of the number of years and length of time covered. The Ministry of Health may wish to take a leadership role in ensuring greater consistencies.

Boundaries

Data is collected and compiled according to several different administrative boundaries such as Development Regions, Regional Hospital Districts, Local Health Areas, Health Units, Census Divisions, Municipalities and School Districts. Between 1981 and 1986, a third subdivision was added to the Cariboo census division. This makes comparison of data extremely difficult.

Data should be collected and compiled in such a way that it is possible to break the information out of administrative boundaries if required.

Recording and Storing Data

During research for the Cariboo Develcpment Region Health Care Study, information was often unavailable because the organization had distributed the original data to the Ministry of Health. Organizations that collect and compile data must secure, manage and control their data.

Inconsistent Reporting and Presentation

Disease categories are not accurately reported. Data is often reported or presented inconsistently, which again makes comparison difficult. An example is the data on communicable diseases. Provincially, the vast majority of communicable diseases reported are gonococcal infections. On the tables broken down into Health Units, such a category of disease is not included.

Indicators

In health care, the use of indicators such as average length of stay and beds/1000 over 65, are extensive. The problem is that these indicators are only useful if compared to a standard. Standards are often non-existent, or cannot be defended in a meaningful way. In particular, indicators are not very useful when determining health care value for dollars spent, because indicators are rarely based on outcome.

The health care industry, politicians, bureaucrats, administrators and medical staff must agree on some useful measure of outcome and link them to costs.

4.4 APPLICATION OF THE HEALTH AUTHORITY CONCEPT

The Health Authority Concept is a decentralized system where a given region has the authority to allocate resources from a global budget to meet its health care needs. The opposite situation is a centralized system where all decisions regarding health care are

made by a central government ministry. Most health care systems fall somewhere between the two extremes.

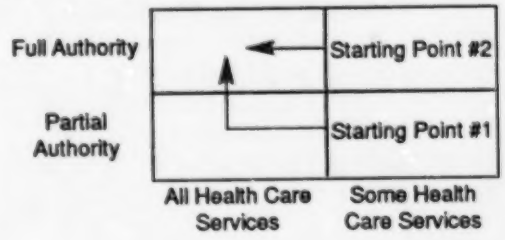
B.C.'s health care system is fairly centralized, with the various budgets controlled by the Ministry of Health. The general conclusion is that the CDR is not yet ready for a full health authority for the following reasons:

- There is no strong regional management board (such as in the Capital Regional District)
- There is a lack of integration and co-ordination among existing programs
- Current regional boundaries do not match health care patterns
- There is too little management, professional expertise and experience in the Region for the operation of a large-scale community-based organization such as a health authority
- The Region has a small, scattered and transient population base.

However, this does not mean that full regionalization cannot be achieved over time.

While the study does not recommend full devolution of authority to the Region immediately, it does offer three scenarios of partial authority for consideration. All three try to meet the particular needs of CDR residents and offer limited delegation of authority within the Region. Two of the scenarios involve partial delegation of authority in specific areas. The third involves full delegation of authority over a specific program to Prince George. Successfully implementing any of these scenarios will create a base for increased autonomy in the future, as illustrated by the following diagram:

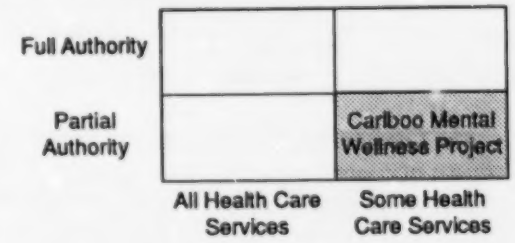
Incremental Approaches to Full Regionalization



The Cariboo Mental Wellness Project

Driven by the problem areas identified in the study, and based upon the Victoria Health Project's example, the following scenario describes a partial regionalization program for all or part of the CDR. Mental health is defined as the ability to cope with everyday stress as a responsible citizen within the community. Difficulties manifest themselves as relationship problems, drug and alcohol abuse or inappropriate behaviour in social, home, school or work environments.

Cariboo Mental Wellness Project



A task force would travel throughout the Region mobilizing local initiatives that enhance the mental health of the community. This process would involve community participation to develop integrated programs based upon the needs of the community.

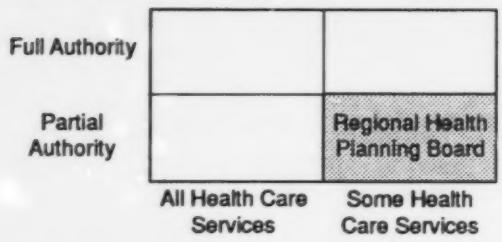
This would give the Region an opportunity to develop expertise in regional management, and communication and coordination between health care personnel in the field.

The Regional Health Planning Board

This scenario also advocates partial authority in a specific area. Regional Health Planning Boards would be formed in accordance with Regional Hospital District boundaries. At the municipal level, Local Health Planning Boards would be developed to carry out the main planning activities.

To give credibility to the Regional Health Planning Boards, they would be granted funding for research purposes and would have the authority to allocate these resources to meet planning needs. As advisors to the Ministry of Health, the board would have access to a branch of the Ministry with a mandate to respond quickly and meaningfully to the recommendations of the board.

Regional Health Planning Board



The Local Health Planning Boards would consist of council members, local agency personnel, professionals and volunteers. The role of this body is to identify community needs and gaps in services, develop an integrated set of priorities for health planning, and put forth research proposals to the regional level.

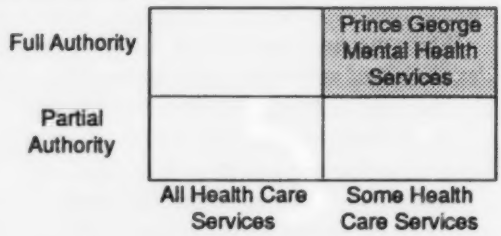
The Local Health Planning Boards might gradually increase their scope of power as their expertise and cooperation develops, eventually gaining responsibility for program delivery.

Prince George Mental Health Services

This scenario proposes that the City of Prince George be given full authority for community mental health services within the City limits. In this model, mental health is fairly broadly defined so that a wide range of programs is included. The City would have full policy-making control and resource allocation power over these services. This does not cover private or independently funded agencies.

A Mental Health Committee elected by the City would appoint knowledgeable members of the community to form a City Mental Health Board. The Board would run mental health services and be accountable for the mental health budget. Its mandate would be to promote co-operation, communication and co-ordination of services to increase efficiency and effectiveness. The Board would hire an executive director who must be sensitive to the needs of professionals and specialized workers to remain autonomous, yet be committed to promoting the team approach to case management and the process of citizen participation.

Prince George Mental Health Services



The objective of this scenario is to develop a team approach to mental health services in order to eliminate gaps in services, facilitate cross-referencing and case management and develop preventive programs.

4.5 SUGGESTED RESPONSIBILITIES - Picking Up Where The Study Leaves Off

Ministry of Regional and Economic Development(Formerly Minister of State for Cariboo)
- Mental Health Initiative
- Health Authority

Ministry of Health
- Programs
- Facilities
- Wellness
- Mediation

Local Government
- Mental Health
- Facilitating
- Leadership

Local/Regional Health/Hospital Boards
- Programs
- Co-operation
- Leadership
- Marketing

Health Care Professionals and Administrators
- Care
- Cooperation
- Networking

Citizens
- Personal Responsibility for Health
- Volunteer Service

"As noted throughout this report, there is an increasing focus on `wellness,' prevention and self-responsibility for lifestyle and health maintenance. Since a variety of factors, including economic, social, educational, environmental and recreational components must combine to create a healthy environment, it has become increasingly apparent that co-operation among health professionals and other community members is essential for the promotion of health."

Excerpt from **Cariboo Development Region Health Care Study,** *Section VI Local Health Authority, p. 243.*